

Remarks

Applicant notes at the outset that the Examiner has produced no explanation to rebut the evidence that shows, as previously stated, that Buer's known path generation circuit 14 does not provide any signal to Buer's critical path logic 20. As such, the record is clear should an appeal be necessary. The amendments introduced above are presented, not to overcome any of the rejections, but rather to facilitate/expedite prosecution.

The instant Office Action dated July 11, 2008, lists the following rejections: claims 1-2, 10-20 and 27-29 stand rejected under 35 U.S.C. § 102(b) over Buer *et al.* (U.S. Patent No. 6,114,880); claims 3-6, 8-9, 21-23 and 25-26 stand rejected under 35 U.S.C. § 103(a) over Buer in view of Chuang *et al.* (U.S. Patent Pub. 2003/0128606); and claims 7 and 24 stand rejected under 35 U.S.C. § 103(a) over Buer and Chuang in view of Flautner *et al.* (U.S. Patent No. 7,278,080). In this discussion set forth below, Applicant does not acquiesce to any rejection or averment in the instant Office Action unless Applicant expressly indicates otherwise.

Applicant respectfully traverses the § 102(b) rejection of claims 1-2, 10-20 and 27-29 because the cited portions of the Buer reference do not correspond to numerous aspects of the claimed invention. The Examiner continues to erroneously rely upon the same portions of the Buer reference while failing to reconcile the fact that these portions are not arranged in the manner required by the claimed invention. *See, e.g.*, M.P.E.P. § 2131 (In order to anticipate a claim, the elements of a prior art reference must be arranged as required by the claim.) Specifically, the rejection is improper because it relies upon the erroneous assertion that Buer's known path generation circuit 14 provides a predetermined reference signal to Buer's critical path logic 20. As is shown by Buer in Figure 1 (reproduced below), Buer's known path generation circuit 14 is in parallel to Buer's critical path logic 20 and, as such, no signals are provided from the known path generation circuit 14 to the critical path logic 20. In this instance, the claimed invention requires that the signal generator generate a reference signal which is provided by the signal generator to the duplicate logic path. As is shown in Buer's Figure 1, none of the signals that are generated by known path generation circuit 14 (*i.e.*, the Examiner's alleged signal generator) are provided to critical path logic 20 (*i.e.*, the Examiner's alleged duplicate logic path) because Buer's paths are arranged in parallel to each other.

Thus, the cited portions of the Buer reference are not arranged as required by the claimed invention.

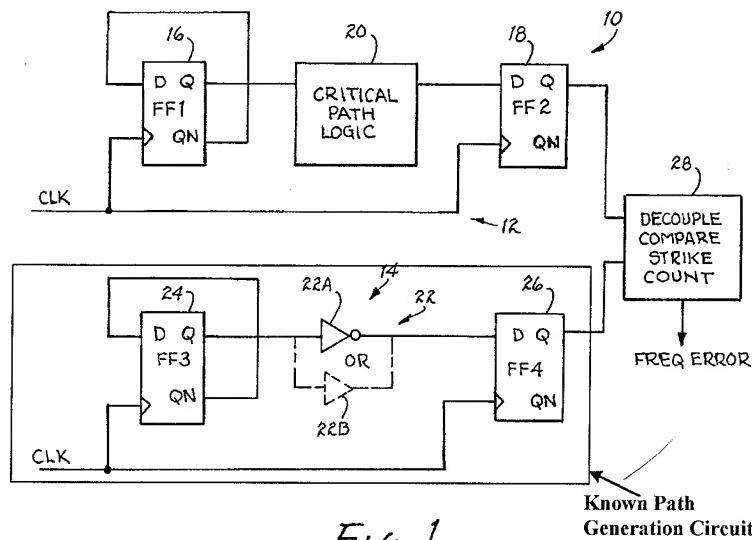


Fig. 1

Applicant has twice previously presented this argument to which the Examiner has failed to respond in any manner. *See, e.g.,* M.P.E.P. § 707.07(f) (“Where the applicant traverses any rejection, the examiner should, if he or she repeats the rejection, take note of the applicant’s argument and answer the substance of it.”). Thus, the Examiner has improperly continued to rely upon the same portions of Buer without responding to substance of Applicant’s previous arguments regarding the fact that the cited portions of Buer are not arranged as required by the claimed invention. Accordingly, the § 102(b) rejection of claims 1-2, 10-20 and 27-29 is improper and Applicant requests that it be withdrawn.

Applicant further traverses the § 102(b) rejection of claims 1-2, 10-20 and 27-29 because the cited portions of Buer do not correspond to aspects of the claimed invention directed to the monitoring circuit that provides a timing closure signal responsive to comparing receipt of the output signal of the duplicate logic path to receipt of the clock signal. The Examiner continues to assert that Buer’s comparator circuit 28 corresponds to Applicant’s monitoring circuit. The cited portions of Buer, however, teach that comparator circuit 28 compares the output of known path generation circuit 14 to the output of critical path generation circuit 12 (*see, e.g.,* Figure 1 and Col. 4:9-30), instead of comparing the receipt of the output signal of critical path logic 20 (*i.e.,* the Examiner’s alleged duplicate logic path) to the receipt of clock signal CLK or to the receipt of any other clock signal

by the comparator circuit 28. In the Advisory Action dated September 8, 2008, the Examiner simply repeats a passage from Buer (*i.e.*, Col. 4:10-30, which makes no mention of any clock signal), which discusses that comparator circuit 28 compares the output of known path generation circuit 14 to the output of critical path generation circuit 12, without providing any explanation regarding the apparent lack of correspondence between Buer's comparator circuit 28 and the claimed invention. Specifically, Buer's comparator circuit 28 does not compare the receipt of a clock signal to the receipt of any other signal. Accordingly, the § 102(b) rejection of claims 1-2, 10-20 and 27-29 is improper and Applicant requests that it be withdrawn. Should any rejection based upon the Buer reference be maintained, Applicant respectfully requests clarification regarding how the Examiner is interpreting Buer's comparator circuit 28 as comparing the receipt of a clock signal.

Applicant respectfully submits that the § 102(b) rejection of claims 2, 13-15 and 20 cannot stand because the cited portions of Buer do not correspond to aspects of the claimed invention directed to first and second pipeline stages that are serially connected and monitoring timing closure in another logic path that is part of the second pipeline stage. The cited portions of Buer do not mention any pipeline stages or monitoring timing closure in another logic path. Accordingly, Applicant requests that the § 102(b) rejection of claims 2, 13-15 and 20 be withdrawn.

Applicant respectfully traverses the § 103(a) rejection of claims 3-9 and 21-26 because the cited portions of the Buer reference do not correspond to the claimed invention as discussed above in relation to the § 102(b) rejection of claims 1 and 19. Applicant submits that neither the addition of the Chuang reference nor the addition of the Flautner reference overcome the above discussed deficiencies of the § 102(b) rejection of claims 1 and 19. In at least this regard, the § 103(a) rejections of claims 3-9 and 21-26 are improper because these claims depend from either claim 1 or claim 19. Accordingly, Applicant requests that the § 103(a) rejections of claims 3-9 and 21-26 be withdrawn.

Applicant further traverses the § 103(a) rejection of claims 3-6, 8-9, 21-23, 25 and 26 because the Examiner fails to provided an adequate reason to combine the Buer and Chuang references. This approach is contrary to the requirements of § 103 and relevant law. *See, e.g., KSR Int'l Co. v. Teleflex Inc.*, 127 S. Ct. 1727, 1741 (U.S. 2007) ("A patent composed of several elements is not proved obvious merely by demonstrating that

each element was, independently, known in the prior art.”). The Examiner asserts that the skilled artisan would be motivated to modify Buer, in some manner which the Examiner does not disclose, in order “to provide an unchanged select signal pulse width”. *See, e.g.*, page 7 of the instant Office Action. Specifically, the Examiner has not specified whether some additional signal having “an unchanged select signal pulse width” is being added to Buer or whether some unidentified signal of Buer is being modified to have “an unchanged select signal pulse width”, and the cited portions of Buer do not mention any selection signal having a pulse width. Thus, the Examiner’s unexplained conclusion that the skilled artisan would modify Buer in order “to provide an unchanged select signal pulse width” does not provide support for how or why Chuang’s unrelated teachings are combinable or otherwise (*see, e.g.*, paragraph 0046) applicable to the cited teachings of Buer.

In order to comply with 35 U.S.C. § 132, sufficient detail must be provided by the Examiner regarding the alleged correspondence between the claimed invention and the cited reference to enable Applicant to adequately respond to the rejections. *See, also*, 37 CFR 1.104 (“The pertinence of each reference, if not apparent, must be clearly explained and each rejected claim specified.”) and M.P.E.P. § 706.02(j), (“It is important for an examiner to properly communicate the basis for a rejection so that the issues can be identified early and the applicant can be given fair opportunity to reply.”) In this instance Applicant is unable to ascertain how the Examiner is proposing to combine the Buer and Chuang references and the cited portions of Buer and Chuang do not provided clarification regarding how these seemingly unrelated teachings are to be combined, which is why Applicant previously requested clarification regarding which elements of Chuang are to be combined with Buer and how these elements are to be combined with Buer. The Examiner, in the Advisory Action, appear to assert that it “is immaterial” how the Buer and Chuang references are being combined because the skilled artisan simply would modify Buer “to provide an unchanged select signal pulse width” since Chuang teaches “an unchanged select signal pulse width”. The Examiner, however, in this instance is still required to provide an explanation regarding how the Buer and Chuang references are being combined in order to afford Applicant a fair opportunity to respond to the rejection. Without such an explanation, the § 103(a) rejection of claims 3-6, 8-9, 21-23, 25 are improper and cannot be maintained.

In addition, the Examiner further asserts that the skilled artisan would be motivated to modify Buer in order “to improve overall performance, and enhance circuit robustness”. *See, e.g.*, page 9 of the instant Office Action. The Examiner, however, has not presented any evidence that such a modification would “improve overall performance” or that it would “enhance circuit robustness”. Applicant submits that the statements made by the examiner amount to no more than conclusory statements of generalized advantages and convenient assumptions about skilled artisans. Such statements and assumptions are inadequate to support a finding of motivation, which is a factual question that cannot be resolved on subjective belief and unknown authority. *See, e.g.*, M.P.E.P. § 2142 (“rejections on obviousness cannot be sustained with mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.”). Applicant submits that the Examiner’s alleged reason to combine is based upon unsupported conjecture in direct violation of the M.P.E.P. and the requirements of § 103.

In view of the above, the § 103(a) rejection of claims 3-6, 8-9, 21-23, 25 and 26 is improper and Applicant requests that it be withdrawn.

Applicant further traverses the § 103(a) rejection of claims 7 and 24 because the Examiner fails to provided an adequate reason to combine the Buer and Flautner references. This approach is contrary to the requirements of § 103 and relevant law as discussed above. Examiner asserts that the skilled artisan would be motivated to modify Buer in order “to compensate additional time and power consumption in recovering the system when a failure occurs”. *See, e.g.*, page 12 of the instant Office Action. The Examiner, however, fails to provide any evidence that the proposed modification would result in the alleged benefit and the Examiner’s argument in this regard seems illogical in view of Buer’s already provided solution. Applicant submits that Examiner’s alleged reason to combine is once again based upon unsupported conjecture. Accordingly, the § 103(a) rejection of claims 7 and 24 is improper and Applicant request that it be withdrawn.

In view of the remarks above, Applicant believes that each of the rejections has been overcome and the application is in condition for allowance. Should there be any remaining issues that could be readily addressed over the telephone, the Examiner is asked to contact the agent overseeing the application file, Peter Zawilski, of NXP Corporation at (408) 474-9063 (or the undersigned).

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